

I claim:

1. A turbine system comprising:

a housing;

impeller member mounted on a rotatable shaft; inside said housing;

a reservoir means for holding a working fluid;

said reservoir means being air tight.

said reservoir means exposable to a source of heat whereby working fluid in said reservoir is heated to an elevated temperature;

exit conduit arranged to conduct working fluid from said reservoir into said housing against said impeller member;

entry conduit for conducting working fluid from said housing into said reservoir;

exit pump means for pumping working fluid from said reservoir through said exit conduit to said housing ;

entry pump means arranged for pumping working fluid from said housing through said entry conduit to said reservoir;

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said exit pump means coupled to said entry pump means in an aoperable arrangement to provide that rate at which said entry pump means delivers working fluid from said housing to said reservoir equals rate at which said exit pump delivers working fluid from said resrvoir to said housing;

a region within ssaid turbine system between asid entry and exit pumps and including said reservoir bein closed providing that said region is heaeted to an elevated temperature and pressure when heat from said source is applied to working fluid in said reservoir.

2. The turbine system of claim 1 wherein said elevated temperature is the critical temperature of said working fluid.

3. The turbine system of claim 1 wherein said working fluid is carbon disulfide.

4. The turbine system of claim 1 wherein said working fluid is pentane.

5. The turbine system of claim 1 wherein said impeller members is a stack of disks.

6. The turbine system of claim 1 wherein said housing is exposed to ambient conditions providing that said housing is at a temeperature close to atmospheric temprature.

7 A tubine system comprising:

a housing;

a stack of disks mounted on a shaft, said shaft being rotatably mounted;

a quantity of working fluid;

a reservoir means for holding said working fluid;

said reservoir means being gas tight.

heating means for heating said working fluid in said reservoir to a critical temperature of said working fluid;

exit conduit arranged to conduct working fluid from said reservoir into said housing against said impeller member;

entry conduit for conducting said working fluid from said housing into said reservoir;

exit pump means for pumping working fluid from said reservoir through said exit conduit

to said housing ;

entry pump means arranged for pumping working fluid from said housing through

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said entry conduit to said reservoir;

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said exit pump means coupled to said entry pump means in an aoperable arrangement to provide that rate at which said entry pump means delivers working fluid from said housing to said reservoir equals rate at which said exit pump delivers working fluid from said resrvoir to said housing;

a region within said turbine system between asid entry and exit pumps and including said reservoir being closed permitting that fluid in said region when heacted to a critical temprature of said working fluid, pressure in said reservoir is increased ro a critical pressure.

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